

Message

From: Vranka, Joe [vranka.joe@epa.gov]
Sent: 5/11/2017 4:21:32 PM
To: Murray, Bill [Murray.Bill@epa.gov]; Stavnes, Sandra [Stavnes.Sandra@epa.gov]; Smidinger, Betsy [Smidinger.Betsy@epa.gov]
Subject: FW: interview synopsis - Anaconda Smelter Site

Hi, Betsy, Sandy, and Bill:

Here's a synopsis of the Montana Standard interview with Charlie Coleman scheduled for this afternoon. Below are the stories that appeared in the Montana Standard last Sunday. Please let me know if you have any questions or concerns or if you would like to talk before this afternoon.

Thank you,

Joe

http://mtstandard.com/natural-resources/superfund/research-on-smelter-workers-shows-the-work-was-deadly-for/article_2503d0ad-5a8e-5aca-98d1-bfc692ee901c.html

http://mtstandard.com/natural-resources/superfund/washoe-smelter-cast-a-long-shadow-but-how-far-does/article_3c0e053b-3928-5bcf-ad94-e8c3015f31f7.html

http://missoulian.com/news/state-and-regional/washoe-smelter-cast-a-long-shadow-but-how-far-does/article_86d61838-cd05-5cb8-8bf0-594505317352.html

From: Moler, Robert
Sent: Thursday, May 11, 2017 9:45 AM
To: Mutter, Andrew <mutter.andrew@epa.gov>
Cc: Coleman, Charles <Coleman.Charles@epa.gov>; Vranka, Joe <vranka.joe@epa.gov>
Subject: interview synopsis - Anaconda Smelter Site

Hey Andrew,

Per your request, a brief synopsis of our interview this afternoon. I've included the Qs and EPA's initial content for a response for the interview.

The 300 square mile Anaconda Smelter Site in Anaconda Montana is part of the Clark Fork Basin cluster of Superfund sites related to the operations of the Anaconda Copper Mining Company in Butte and Anaconda. These sites include Anaconda Smelter Site, the Silver Bow Creek/Butte Area Site, the Milltown Reservoir/Clark Fork River Site, and the Montana Pole Site.

Susan Dunlap with the Montana Standard Newspaper covers Superfund issues in Butte and Anaconda. She is interested in the EPA action levels for lead and arsenic at the two sites and how/why the remedies differ. Two recent articles:

- Washoe Smelter cast a long shadow, but how far does it reach? Montana Standard – May 7, 2017
- Research on smelter workers shows the work was deadly for some Montana Standard - May 7, 2017

Susan is scheduled to interview with Charlie Coleman, RPM at the Anaconda site, 5/11/17 to discuss lead at the Anaconda Site. This follows an interview that took place 2/16/17 with Charlie and Susan Griffin, R8 Toxicologist.

Susan Dunlap has also asked for another interview with Nikia Greene, RPM at the Butte Site, to discuss arsenic in Butte. That will likely be set up for next week and will also be the second interview with Nikia about Butte this year.

Q&A-approved 5/10 NG -----

1) Can you review with me how it was that lead was not initially a contaminant EPA implemented remedy for?

- a. As identified in the 1996 Community Soils ROD pg. DS-27 "EPA generally considers risk from exposure to lead unacceptable if more than 5% of children have blood-lead levels in excess of 10ug/dl (EPA 1994c).
- b. Modeling predicted that 5.3 % of children in Subarea E may have blood-lead levels in excess of 10 ug/dl. Although risk from lead exposure would be considered marginally unacceptable for exposure in Subarea E, use of conservative default assumptions in the IEUBK model have likely overestimated this risk.
- c. Thus, EPA will not address risks to lead at the Community Soils OU."

2) Do lead action levels differ for other-use areas?

- a. There is only a lead action level for residential use areas. There are no lead action levels for other use areas.

3) I understand that the yards in east Anaconda now getting a second cleanup were originally remediated about 25 years ago. Is that roughly correct?

- a. No. residential yards under the 1996 ROD were remediated between 2002 and 2010.
- b. Those residential yards that were remediated will be resampled and cleaned up for lead if needed.

4) Can you give me the range of lead levels found in residential yards in east Anaconda and Opportunity? Are there other spots in Anaconda Superfund site that will be or have been tested for lead?

- a. Lead data collected by Atlantic Richfield and CDM can be found in the following documents:
 - i. *Analysis of Lead in Anaconda Community Soils* (Atlantic Richfield, 2007);
 - ii. *Draft Final Community Soils Interior and Attic Dust Characterization Report* (Atlantic Richfield, 2008);
 - iii. *Community Soils OU Residential Subsurface Soils Characterization Data Summary Report* (CDM, 2007); and
 - iv. *Residential Soils Data Interpretation and Analysis Report DIAR* (CDM, 2008).
- b. Conclusions from the DIAR for lead in soils found:
 - i. "95 of the 142 yards (67 percent) that were sampled but not cleaned up had area weighted average lead concentrations above 400 ppm.
 - ii. 125 of 142 (88 percent) evaluated had surface soil concentrations above 400 ppm in at least one yard component.
 - iii. 33 of 142 (23 percent) had a surface soil lead concentration in at least one yard component greater than 1200 ppm. The actual average concentration of lead in surface soils was 507 ppm, which is much higher than the calculated 290 ppm average from the 1996 HHRA"
- c. EPA continues to sample residential yards under the current Community Soils Remedial Action Work Plan (Atlantic Richfield, 2015)

- 5) When did EPA first begin to see the lead concentrations high enough to make you rethink the ROD? How high were those concentrations? See response to #4
- 6) Is EPA or has EPA tested attics for lead? Yes.
- 7) The way I understand EPA's risk assessment for arsenic exposure, if someone pops into an attic, say once or thrice a year for holiday decorations, the likelihood of that potential arsenic exposure in attic dust is so low, it's too minimal to fear that homeowner will develop cancer 20 years later. Is that, in a general sense, correct?
 - a. Risk is a function of both the magnitude of exposure and the frequency of exposure. To have an adverse risk from exposure to arsenic in attic dust, both the concentration of arsenic in the attic dust need to be elevated as well as the amount of time spent in the attic in contact with the dust.
 - b. Exposure to lead in attic dust was evaluated in Butte for both occasional use as well as remodeling. Despite the elevated concentrations of lead, the low frequency of exposures did not result in adverse health effects.
- 8) But, with lead exposure, particularly in children, 'no lead is good lead,' says the CDC and every lead researcher I've come across. Are you considering revisiting EPA's position on attic abatement in Anaconda due to lead? Or is it too late for that, since that was not included in the 2013 ROD amendment?
 - a. Lead in attics is included in the 2013 ROD Amendment. See page II-19.
- 9) How is Anaconda's water tested for lead?
 - a. Anaconda's water supply is sampled and tested for lead as required by the State of Montana for municipal water supplies. Domestic wells are not tested for lead.

Robert Moler
Community Involvement Coordinator
EPA – Montana
406.457.5032